ABSTRACT OF THE DISCLOSURE

A method of making an optical fiber preform in which a starting member prepared by fusing dummy rods to both end portions of a core preform is axially reciprocated relative to a glass synthesizing burner while being rotated about its axis, so that fine particles of glass synthesized by the burner are sprayed and deposited onto the outer periphery of the starting member, whereby a soot body is formed. At this time, marking points are set at positions separated from junctions between a core preform and the dummy rods toward the respective dummy rods by a predetermined distance, the relative reciprocating is effected by reversing the relative movement direction at the time when the burner reaches turning points located closer to the respective end portions than are the marking points, and a glass material is constantly supplied to the burner from a material supply device when the burner is located between the marking points.